

## Lead Project Scientist

Storm or Project Earl Experiment name TDR/Ocean Winds  
Flight ID 100830JA Mission ID WX07A Earl7

### Preflight

1. Participate in general mission briefing.
2. Determine specific mission and flight requirements for assigned aircraft.
3. Determine from AOC flight director/meteorologist whether aircraft has operational fix responsibility and the mission designation.
4. Contact HRD members of crew to:
  - a. Assure availability for mission.
  - b. Review field program safety checklist
  - c. Arrange ground transportation schedule when deployed.
  - d. Determine equipment status.
5. Meet with AOC flight director and navigator at least 3 hours before take-off for initial briefing.
6. Meet with AOC flight crew at least 2 hours before take-off for crew briefing. Provide copies of flight requirements and provide a formal briefing for the flight director, navigator, and pilots.
7. Report status of aircraft, systems, necessary on-board supplies and crews to MGOC in Miami.
8. Before take-off, brief the on-board GPS dropsonde operator on times and positions of drop times.
9. Make sure each HRD flight crew member has a life vest.
10. Perform a headset operation check with all HRD flight crew members. Make sure everyone can hear and speak using the headset.

### In-Flight

1. Confirm from AOC flight director that satellite data link is operative (information).
2. Confirm camera mode of operation.
3. Confirm data recording rate.
4. Complete Lead Project Scientist Form.
5. Check in with the flight director to make sure the mission is going as planned (i.e. turns are made when they are supposed to be made).

### Post flight

1. Debrief scientific crew.
2. Gather completed forms for mission and turn in to data manager at HRD.
3. Obtain a copy of the 10-s flight listing from the AOC flight director. Turn in with completed forms.
4. Obtain a copy of the radar DAT tapes. Turn in with completed forms.
5. Obtain a copy of serial flight data on thumb drive. Turn in with completed forms.

[Note: all data removed from the aircraft by HRD personnel should be cleared with the AOC flight director.]

6. Report landing time, aircraft, crew, and mission status along with supplies (tapes, etc.) remaining aboard the aircraft to MGOC.
7. Determine next mission status, if any, and brief crews as necessary.
8. Notify MGOC as to where you can be contacted and arrange for any further coordination required.
9. Prepare written mission summary using **Mission Summary** form.

### Lead Project Scientist Check List

Storm or Project \_\_\_\_\_ Experiment name \_\_\_\_\_

Flight ID \_\_\_\_\_ Mission ID \_\_\_\_\_

**A. Participants:**

HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	<u>Crane</u>	Flight Director	<u>Sears</u>
Radar/Workstation	<u>Mwillo/Cordier</u>	Pilots	<u>Nelson/Kulverson</u>
Cloud Physics	_____	Navigator	<u>Sloan</u>
Photographer/Observer /Guests	_____	Systems Engineer	<u>Bast</u>
Dropwindsonde	<u>Leighton</u>	Data Technician	_____
AXBT/AXCP	_____	Electronics Technician	_____
	_____	Other	_____

**B. Take-off and Landing Times and Locations:**

Take-Off: 1925 UTC Location: Barbados

Landing: 145 UTC Location: 11

9 580

Number of Eye Penetrations: 3

**C. Past and Forecast Storm Locations:**

Date/Time	Latitude	Longitude	MSLP	Maximum Wind

**D. Mission Briefing:**

28  
21Z  
29  
21Z  
30 → 21Z

2900  
3000  
31  
00

Storm or Project \_\_\_\_\_ Experiment name \_\_\_\_\_

Flight ID \_\_\_\_\_ Mission ID \_\_\_\_\_

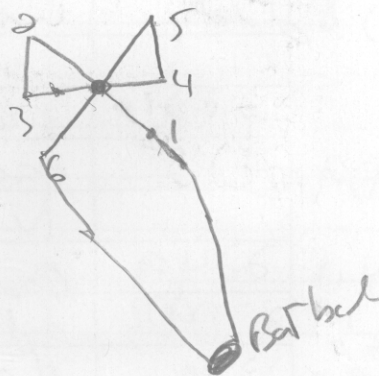
E. — Equipment Status (Up ↑, Down ↓, Not Available N/A, Not Used O)

Equipment	Pre-Flight	In-Flight	Post-Flight	# DATs / CDs / Expendables / Printouts
Radar/LF				
Doppler Radar/TA				
Cloud Physics				
Data System				
GPS sondes				
AXBT/AXCP				
Ozone instrument				
Workstation				
Cameras				

REMARKS:

Similar to 29 I flight  
 Slow now Cat 3 (105 kt @ 15730)  
 Butterfly pattern (~~to Attach 1~~), 3 Perchh  
 ~ 620 flight time.

14 planned drops  
 (eye all, eye (2), end pts)  
 + 2 xtr





207011.

### Lead Project Scientist Event Log

Date \_\_\_\_\_ Flight ID \_\_\_\_\_ LPS \_\_\_\_\_

44 D1  
D2  
D3  
ORR D3

Time	Event	Position	Comments
19:57Z	Takeoff	Badus	Clear eye in vis @ 19:57Z
20:48Z	IP Pt 2	18.37 63.16	Start <del>IP</del> - NW leg
21:10Z	SE eye eval	19.71 64.55	Pass eye eval is the most
21:13Z	<u>Center</u>	<u>19.29 64.8</u>	Active side
			RR <sub>1</sub> = 69 SFM <sub>1</sub> = 57
			SL Pext @ 938 FLV = 10
			f
D4 21:16	Weyand	19.43 65.05	precip free w. eye
	NOTE: very	dry on west	
D5 21:42	Pt 2	19.99 66.53	downwind leg
			Dry air eval Drop (1)
D6 22:00	Pt 3	18.60 66.31	
			Dry air eval Drop (2)
D7 22:10	Mid Pt 3-4	18.90 65.74	Mid Pt w-Elg
	<del>Weyand</del>		air eval Drop (3)
D8 22:21	Weyand	19.32 65.08	w. eye eval
	not (9711)	max V 42 m/s	Nicer eye. some pix
22:23	eye	X = 19.35 64.92	(@ Elder)
D9 22:25	pass eye eval	19.44 64.87	Solid test
	Nav: 295 @ 11.2		
D10 22:49	end Pt	20.32 63.41	Pt 4, decal to 7k
D11 23:0903	end Pt 5	20.99 64.99	Pt 5, shut lat pass
D12 23:30	eye eval	19.71 65.11	question mark slip
D13 23:35	eye	19.51 65.16	good drop OK @ FL
D14 23:39	SE eye eval	19.18 65.17	low. cae. 80k ft.
D15 00:04	end Pt Return 6	17.87 65.18	Finished

Gateway to Africa  
1hr

note: 0137  
- Darker  
- Colored

note: 297 @ 11 kts

? - eye eval  
SL re!



## Mission Summary

### Storm name

YYMMDDA# Aircraft 4\_RF

### Scientific Crew (4 RF)

Lead Project Scientist \_\_\_\_\_

Radar Scientist \_\_\_\_\_

Cloud Physics Scientist \_\_\_\_\_

Dropwindsonde Scientist \_\_\_\_\_

Boundary-Layer Scientist \_\_\_\_\_

Workstation Scientist \_\_\_\_\_

Observers \_\_\_\_\_

*Mission Briefing: (include sketch of proposed flight track or page #)*

*Mission Synopsis: (include plot of actual flight track)*

*Evaluation: (did the experiment meet the proposed objectives?)*

yes all objects met

*Problems: (list all problems)*

None. vent well

*Expendables used in mission:*

GPS sondes : 15 no failures

AXBTs : 0

Sonobuoys: \_\_\_\_\_